*SHILAP Revista de lepidopterología,* 49 (193) marzo 2021: 47-54 eISSN: 2340-4078 ISSN: 0300-5267
https://doi.org/10.57065/shilap.323

# The New World Ocnonemidinae genus *Neogalea* Hampson, 1906 (Lepidoptera: Noctuidae)

V. O. Becker

**Abstract**

The genus *Neogalea* Hampson, 1906 is reviewed, including three species. *N. sunia* (Guenée, 1852) with Pan-American distribution, *N. caracara* Troubridge, 2020 known from the Florida Keys and Brazil and a new one restricted to a specific region of Brazil: *Neogalea sororcula* Becker, sp. n. (Semiarid or Caatinga biome). A key to species, diagnosis, descriptions, and illustrations for the three species are presented.
KEY WORDS: Lepidoptera, Noctuidae, *Neogalea*, taxonomy, diagnosis, distribution, Brazil.

**El género *Neogalea* Hampson, 1906 de Onconemidinae del Nuevo Mundo (Lepidoptera: Noctuidae)**

**Resumen**

Se revisa el género *Neogalea* Hampson, 1906, incluyendo tres especies: *N. sunia* (Guenée, 1852) con distribución Panamericana, *N. caracara* Troubridge, 2020 conocida de los Caicos de la Florida y de Brasil, y una nueva *N. sororcula* Becker, sp. n., restringida a la región semiárida de la Caatinga en Brasil. Se presenta una clave para las especies, diagnosis, distribuciones e ilustraciones de las tres especies.
PALABRAS CLAVE: Lepidoptera, Noctuidae, *Neogalea*, taxonomía, diagnosis, distribución, Brasil.

## Introduction

*Neogalea* Hampson, 1906, has been regarded as a monotypic genus since it was proposed to accommodate *N. braziliensis* Hampson, 1906. TODD (1972: 260) synonymized *N. braziliensis* under *N. esula* (Druce, 1889), and HAYES (1975: 173), described *N. esula longfieldae* Hayes, 1975*,* a form from the Galapagos Archipelago. POOLE (1989: 681), treated all these names, in the Cuculliinae, as synonyms of *N. sunia* (Guenée, 1852). A second species: *N. caracara* Troubridge, 2020 was just described, based on a single male from the Florida Keys and is here recorded for Brazil for first time. *Neogalea sunia* is a common species throughout the neotropical region, whose caterpillars feed on *Lantana* species, and for this reason has been introduced into several countries as a biological control agent (ZHANG, 1994: 333). The genus was listed in the Oncocnemidini by FRANCLEMONT & TODD (1983: 146), next to *Catabena* Walker, 1865, and by TROUBRIDGE (2008: 59) (as Oncocnemidinae) between *Catabenoides* Poole, 2002 and *Calophasia* Stephens, 1829.

## Materials and methods

This review is based on 88 specimens (including nine genitalia slides), 32 in VOB, 56 HTC, and

on the type-material in NHMUK. Synoptic collections representing the Noctuidae species in VOB were taken to the last institution and to USNM and compared with their collections in previous years. The global coronavirus quarantines prevented travel or borrowing specimens during the preparation of this manuscript, but it was possible to examine images of the USNM specimens, including seven genitalia slides. The holotype of the new species is provisionally deposited in VOB, and will be transferred, together with the collection, to a Brazilian institution in the future. Genitalia were prepared following the methods described by ROBINSON (1976). Terms for morphological characters follow HODGES (1971).

**Abbreviations**

| | |
|---|---|
| CNC | Canadian National Collection, Ottawa, Canada |
| FW | Forewing |
| G. s. | genitalia slide |
| HTC | Hubert Thöny Collection, Camacan, Bahia, Brazil |
| HW | Hind wing |
| NHMUK | Natural History Museum, United Kingdom |
| MNHN | Muséum Nationale d'Histoire Naturelle, Paris, France |
| USNM | National Museum of Natural History, Smithsonian Institution, Washington, USA |
| VOB | Vitor O. Becker collection, Serra Bonita Reserve, Camacan, Bahia, Brazil |

**Results**

The large series of specimens studied revealed that three species belong to *Neogalea,* one of them new. All species are described, and diagnosis, and illustrations of both adults and genitalia are presented allowing the identification of the species.

*Neogalea* Hampson, 1905
TS: *Neogalea braziliensis* Hampson, 1905. *Cat. Lep. Phal.,* **6**: 8

Diagnosis: Medium size; FW 12-16 mm (28-36 mm wingspan), gray to dark gray, ante- and postmedial bands indistinct, ill-defined; HW translucent white, margins narrowly fringed gray. Abdomen with a pad with long bristles at 2nd sternite. Male genitalia symmetrical; uncus long, evenly curved, apex sharp; sacculus broad, 2/3 as long as valva, sacculus process long, tapering distad, strongly bent towards costa. Aedeagus as long as valva; vesica with a small sac with pouch of small cornuti near base, rows of long, thin spines distad. Female genitalia with ostium wide, ductus bursae short, with sclerotized area before corpus bursae; corpus bursae globose or elongate, signum present or absent; appendix bursae large; both corpus and appendix bursae wrinkled.

Distribution: New World Tropics, from southern United States, to southern Brazil and Argentina.

Remarks: TODD (1972: 260) regarded *Neogalea* Hampson, 1906 as distinct to *Catabena* Walker, 1865 on the base of the corona, formed by a multiple row of long, thin bristles, whereas in *Catabena* (where he included all the species currently in *Catabenoides* Poole, 2002), it is formed by a single row of stronger bristles along the apical margin.

There is a lineage of species that are externally similar to *Neogalea* in Central America and the Caribbean which are near *Neogalea* and *Catabenoides* but differ from both in male genitalia. The sacculus processes are long, straight, pointing to the apex of valva, whereas in *Neogalea* they are angled towards costa (examples include USNM ENT 01276341, 01343384, 01343385, and VOB 14210, 72842, 121899, 129151). Thus, any critical identifications of *Neogalea* from south of the United States should include examination of male genitalia.

Key to species: male genitalia

**1.** Valva strongly constricted .....*caracara*
Valva with margins parallel.....2

**2.** Sacculus process single .....*sunia*
Sacculus process branched .....*sororcula*

*Neogalea sunia* (Guenée, 1852) (Figs. 2, 6, 7, 11)
*Xylomyges sunia* Guenée, 1852. *Hist. nat. Ins., Noct*., **1**: 149
Holotype ♂, [US VIRGIN ISLANDS]: St. Thomas, [no further data] (MNHN) [image examined].
= *Neogalea braziliensis* Hampson, 1905. *Cat. Lep. Phal.,* **6**: 8
Holotype ♀, BRAZIL, Rio de Janeiro, Rio de Janeiro (NHMUK) [examined]
= *Xylina esula* Druce, 1889. *Biol. Cent. Amer. Lep.-Het.*, **1**: 297, pl. 28, fig. 1
Holotype ♂, MEXICO, Tabasco, Teapa (NHMUK) [examined].
= *Neogalea esula longfieldae* Hayes, 1975. *Proc. Calif. Acad. Sci.,* **40**(7): 173
Holotype ♂, ECUADOR, Galápagos Archipelago, Isabela Island, Tagus Cove, 150 ft, 3-VIII-1924 (Collenette) (NHMUK) [examined].

Diagnosis: Sexes similar (Fig. 2). FW 13-15 mm (30-35 mm wingspan), gray; veins marked dark gray; mixed with white scales; antemedial band indistinct, postmedial ill-defined, serrate, slightly visible from M3 to dorsum. HW translucent white, thin, gray margin, broadening towards apex, veins gray towards margins. Abdomen gray, whitish ventrally. Male genitalia (Fig. 6): Sacculus process long, tapering distad, bent in a straight angle towards mid costa; aedeagus (Fig. 7) as long as valva, vesica with row of long, thin spines. Female genitalia (Fig. 11): Ostium bursae wide; ductus bursae with short membranous base, sclerotized distad; corpus bursae globose, signa indistinct; appendix bursae half the size of corpus bursae; both corpus and appendix bursae finely wrinkled.

Material studied: 61 ♂♂ (5 g. s.), 24 ♀♀ (1 g. s.). MEXICO, Chiapas, Villas las Rosas, 1300 m, 1 ♂, 27-VI-1981 (Becker 43347) (VOB); San Luis Potosi, Cerro Potosi, 2800 m, 1 ♂ (g. s. 5563), 26-VI-1997 (Becker 110281) (VOB); Ciudad Maiz, 1200 m, 1 ♂, 24-VI-1997 (Becker 110135); Tamaulipas, San Fernando, 50 m, 1 ♂, 1 ♀, 28-VI-1997 (Becker 110454) (VOB); Gómez Farias, 1200 m, 1 ♂, 2 ♀♀, 29-31-VII-1988, 26-V-1997 (Becker 69241, 108952) (VOB); CUBA: Santiago, Gran Piedra, 1200 m, 1 ♂, 1 ♀, 20-VII-1980 (Becker 72841) (VOB); BRITISH VIRGIN ISLANDS, Guana Island, 80 m, 4 ♂♂ (g. s. 5595), 9-23-VII-1987, X-1989 (Becker & Miller 66610, 70709); US VIRGIN ISLANDS, St. Thomas, 300 m, 1 ♂ (g. s. 5562), 25-30-VII-1987 (Becker 66997) (VOB); ECUADOR: Loja, Catamayo, 1300 m, 1 ♀ (g. s. 5564), 20-XII-1992 (Becker 102614) (VOB); BRAZIL: Bahia, Camacan, 15º23'S - 39º33'W, 800 m, 6 ♂♂ (g. s. 5565), 21-30-IX-1991, 9-20-IV-2005, VI, VIII-2010, II-2012 (Becker 83593, 136287, 145870, 146654, 148636) (VOB); Porto Seguro, 16º27'S - 39º03'W, 40 m, 1 ♀ (g. s. 5566), 6-8-X-2008 (Becker 140962) (VOB); Ceará, Pacatuba, 250 m, 1 ♀, 6-IV-19914 (Becker 91566) (VOB); Espirito Santo, Santa Leopoldina, 650 m, 25 ♂♂, 11 ♀♀, 10-25-XI, 8-20-XII-1996, 10-25-I, 15-IV, 10-VI-10-VII, 20-VIII, 15-X-1997, 2-29-IV-1998, 1-19-V; 1-31-XI-1999, 1-3-III-2000 (Thöny) (HTC); Minas Gerais, Sete Lagoas, 720 m, 20-V-1974 (Becker 2886) (VOB); Poté, 500 m, 2 ♂♂, 1 ♀, 15-XI-1985, 30-IV-1996,15-II-1997 (Thöny) (HTC); Paraná, Curitiba, 920 m, 1 ♂, 25-X-1975 (Becker 3394) (VOB); Tijucas do Sul, Castelhanos, 500 m, 7 ♂♂, 7 ♀♀, 2-29-V-1999 (Thöny) (HTC); Rio de Janeiro, Arraial do Cabo, 50 m, 3 ♂♂, 29-I-1985 (Becker 55406) (VOB); Santa Catarina, São Bento do Sul, 800 m, 2 ♂♂, 2-9-VII-1998 (Thöny) (HTC); USA HAWAII, Oahu, Honolulu, 1 ♂, 16-28-II-1992 (Becker & Miller) (VOB).

Distribution: Widely distributed throughout the New World tropics, from southern USA, south to Argentina and southern Brazil. Specimens in USNM indicate it is widespread in Southern California, Arizona, and Texas, and occasionally collected in Florida. It has been intentionally introduced into Australia, Hawaii, New Caledonia, and South Africa as a biological control of weedy *Lantana* species (ZHANG, 1994: 333). The South African introduction was apparently not successful (BAARS, 2003).

Remarks: A common species, occurring in all kinds of biomes, from sea level up to 2800 m, especially in open, disturbed areas, where *Lantana* species grow as invasive, pioneer plants. COMSTOCK & DAMMERS (1935) and REINERT *et al*. (2009) described the biology of *sunia* in California and Texas, respectively. BADO *et al*. (2004) described the morphology of all development stages (including six instars), biological traits and damage in Argentina. Male genitalia (Fig. 5) of specimens from St. Thomas, the type locality of *sunia,* from Mexico, Ecuador and from Brazil are consistently similar. Similar to *sororcula* and *caracara,* easily distinguished from those by the shape of genitalia: sacculus process a single, long, curved rod in *sunia* whereas forked in *sororcula;* valva strongly constricted, with large sacculus in *caracara.*

Hampson treated this species in three different places, once in the Cuculliinae, as *Neogalea braziliensis* Hampson, 1906: 7, and twice in the Acronyctinae: *esula* Druce in *Catabena* Walker (HAMPSON, 1909: 234), and *sunia* Guenée, in *Xylomyges* Guenée, 1852 [= *Spodoptera* Guenée, 1852] as the senior synonym of *albula* (Walker, 1857) (HAMPSON, 1909: 274). TODD (1972: 260) synonymized *braziliensis* under *esula* and treated both as *Neogalea.* POOLE (1989: 681) established the synonymy as treated above.

The wings have been figured multiple times including BARNES & MCDUNNOUGH (1913: pl. 9), HAYES (1975), HOLLOWAY (1977), BECKER & MILLER (2002) and BADO *et al*. (2004) but the genitalia have evidently never been figured.

***Neogalea sororcula* Becker, sp. n.** (Figs. 1, 4, 5, 12)

Material examined: Holotype 1 ♂, Brazil, Bahia, 9 km W of Boa Nova, 14º36'S - 40º26'W, 750 m, 4-XII-2013, g. s. 5567 (Becker 150604) (VOB). Paratypes: 1 ♀, g. s. 5568, same data as holotype (VOB); 1 ♂, Idem, Jussiape, 700 m, 1-30-XI-1997 (Thöny) (HTC).

Diagnosis: Sexes similar. FW dark gray; darker between ante- and postmedial bands; HW translucent white, slightly dusted gray around apex. Male genitalia symmetrical, sacculus process forked distad, as sharp pointed, asymmetrical Y. Female genitalia: Female genitalia with sclerotized area before corpus bursae larger than in *sunia*; corpus bursae oblong.

Description: Sexes similar. Male 12 mm (28 mm wingspan); female (Fig. 1) 14 mm (33 mm wingspan). Dark gray. Labial palpi with whitish scales below; frons black, vertex whitish, thin black line across; antenna black, some white scales on basal third. Thorax dark gray dorsally, white ventrally. Legs gray, hind tarsi black. Patagia with thin, black line below; tegula dark gray. FW with veins and lines between veins, black; area basad to postmedial band darker; ante- and postmedial bands indistinct, postmedial, above dorsum edged whitish outside; two small, elongate, white dots in the middle: one at middle of cell, the other just outside; area on tornus, distad of postmedial band, whitish. HW translucent white, termen edged with thin, gray line, widening towards apex. Abdomen dorsally light gray, banded with thin, white lines whitish underside.

Male genitalia (Fig. 4): Uncus thin, long, curved rod, basal 2/3 with same diameter throughout, tapering distad to a sharp tip; sacculus process forked, longer branch crossing valva reaching mid costa; juxta subsquare, wider towards base. Aedeagus (Fig. 5) slightly shorter than valva, bent ventrad; vesica with a lateral, long sac with thin, long spine at tip; two pockets of strong cornuti at base; multiple long bristles to apex.

Female genitalia (Fig. 12): Ostium bursae, conical; ductus bursae short, membranous at base, strong, widely sclerotized at distal third towards corpus bursae; corpus bursae large, elongate; signum absent; appendix bursae smaller than corpus bursae.

Distribution: Brazil, Bahia, in the Caatinga biome or semiarid region

Etymology: From the Latin *soror* = sister; diminutive [the little sister]; feminine.

Remarks: Similar to *C. sunia*; slightly smaller, darker. Easily distinguished by male genitalia, with sacculus process branched into an asymmetrical, Y-shape structure (a single process in *sunia*).

*Neogalea caracara* Troubridge, 2020 (Figs 3, 8-10)
*Neogalea caracara* Troubridge, 2020. *Insecta mundi,* **789**: 32
Holotype ♂, USA, Florida, Munroe Co., Florida Keys, Dagny Johnson State Park, 11-III-2012 (CNC) [not examined].

Material studied three specimens (two g. s.). BRAZIL: Rondonia, Cacaulândia, Rancho Grande, 350 m, 2 ♂♂, 1 ♀, 1-20-XI-1999, g. s. 5569, 5570 (Thöny) (VOB, HTC).

Diagnosis: Sexes similar. Male FW 17 mm (38 mm wingspan); female FW 18 mm (wingspan). Gray; veins marked dark gray; mixed with white scales; antemedial band indistinct, postmedial ill-defined, serrate, slightly visible from M3 to dorsum. HW translucent white, narrowly bordered gray, broadening towards apex, veins dark towards margins. Abdomen gray, whitish ventrally. Male genitalia: valva strongly constricted at distal third; aedeagus slightly shorter than valva. Female genitalia: Ostium bursae wide, nearly square; corpus bursae elongate; signa present.

Description male (Fig. 3): 17 mm (38 mm wingspan); female 18 mm (40 mm wingspan). Gray. Labial palpi whitish below; frons black, white line above, below antenna; vertex gray; antenna fuscous, mixed with white scales at basal half. Thorax dorsally mixed with white, black, and fuscous scales; patagia with four horizontal, thin lines, the outside ones black. FW veins and lines between veins dashed dark gray; mixed with white scales; antemedial band indistinct, postmedial ill-defined, serrate, slightly visible from M3 to dorsum, white outside; diffuse fuscous patch on tornus; termen edged with thin lunules between veins; cilia gray, interrupted white on veins. HW translucent white, narrowly bordered gray at apex, veins dark towards margins. Abdomen gray, whitish ventrally.

Male genitalia (Fig. 8): Uncus long, curved, basal third flattened dorso-ventrally, distal two thirds a curved rod, densely covered with long bristles, apex blunt; valva strongly constricted at distal third; sacculus large, ventral margin evenly round, distal end tapering to a curved, sharp pointed hook; cucullus oblong, ventral margin with a thin, long, curved, sharp pointed process; corona a multiple row of thin, long spines; ampulla triangular; juxta trapezoidal, wider basal; saccus converging to a sharp process in the middle. Aedeagus (Fig. 9) twice as long as thick, straight; vesica with a group of cornuti near base, multiple, long spines distad.

Female genitalia (Fig. 10): Ostium wide, square, slightly sclerotized; pair of lateral, rounded knobs at junction with ductus bursae; ductus bursae narrow, wrinkled; corpus twice as long as wide; wrinkled; signa a pair of opposite, long, narrow, minutely spined, with ridge along middle; appendix bursae globose, a sclerotized band towards connection with corpus bursae.

Distribution: Southern USA (Florida Keys) and Brazil (Amazon region).

Remarks: Externally almost identical to *sunia*, slightly larger and paler. Genitalia much different, especially the constricted valva with large sacculus, as shown by the illustrations. The species was described from a single male specimen. The records from Brazil expands it is distribution widely and brings information about its female. This manuscript was ready and under review for publication, including the description of this species as new, when the author received Troubridge's publication.

**Acknowledgements**

Robiara U. S. Becker and Paulo Nunes (Serra Bonita Reserve) prepared the illustrations. Hubert Thöny, Camacan, Bahia, made available the specimens in his collection. Scott E. Miller revised the manuscript, making several corrections and suggestions that improved it greatly, and for providing images of specimens from USNM.

## BIBLIOGRAPHY

BAARS, J.-R., 2003.– Geographic range, impact, and parasitism of lepidopteran species associated with the invasive weed *Lantana camara* in South Africa.– *Biological Control,* **28**: 293-301. DOI:10.1016/S1049-9644(03)00070-7.

BADO, S. G., PANUNZIO M. G. & ARTALE, L., 2004.– Aspectos morfológicos, biológicos y daño de *Neogalea sunia* Guenée (Lepidoptera, Noctuidae) sobre *Lantana camara* L. (Verbenaceae).– *Idesia*, **22**: 35-43.

BARNES, W. & McDUNNOUGH, J. H., 1913.– Illustrations of rare and typical Lepidoptera (continued).– *Contributions to the Natural History of the Lepidoptera of North America,* **2**(1): 1-47, plates I-XXI.

BECKER, V. O. & MILLER, S. E., 2002.– Large moths of Guana Island, British Virgin Islands: a survey of efficient colonizers (Lepidoptera: Sphingidae, Notodontidae, Noctuidae, Arctiidae, Geometridae, Hyblaeidae, Cossidae).– *Journal of the Lepidopterists' Society,* **56**: 9-44, 191-192.

COMSTOCK, J. A. & DAMMERS, C. M., 1935.– Notes on the early stages of three butterflies and five moths from California.– *Bulletin of the Southern California Academy of Sciences,* **33**: 136-151 (1934).

DRUCE, H., 1889.– Lepidoptera-Heterocera.– *In* F. D. GODMAN & O. SALVIN. *Biologia Centrali-Americana,* **1**: 490 pp.

FRANCLEMONT, J. G. & TODD, E. L., 1983.– Noctuidae.– *In* R. W. HODGES *et al.,* eds. *Check List of Lepidoptera of America North of Mexico*: 120-159. Classey, London.

GUENÉE, A., 1852.– *Histoire naturelle des insectes. Noctuélites I*, **5**: 407 pp.

HAYES, A. H., 1975.– The larger moths of the Galapagos Islands (Geometroidea: Sphingoidea: Noctuoidea).– *Proceedings of the California Academy of Sciences,* (4) **40**: 145-208.

HAMPSON, G. F., 1906.– *Catalogue of Lepidoptera Phalaenae in the British Museum*, **6**: 532 pp. Taylor and Francis, London.

HAMPSON, G. F., 1909.– *Catalogue of Lepidoptera Phalaenae in the British Museum,* **8**: 583 pp. Taylor and Francis, London.

HODGES, R. W., 1971.– Sphingoidea.– *In* R. B. DOMINICK *et al. The moths of America North of Mexico,* **21**: 158 pp. Classey and R. B. D. Publications, London.

HOLLOWAY, J. D., 1977.– *The Lepidoptera of Norfolk Island: Their biogeography and ecology*: 291 pp. W. Junk, The Hague.

POOLE, R. W., 1989.– Noctuidae-. *Lepidopterorum catalogus* **118**: 1-1314.

REINERT, J. A., GEORGE, WS. W., MACKAY, A. & CAMPOS, C., 2009.– Resistance Among *Lantana* Cultivars to the *Lantana* Stick Caterpillar, *Neogalea sunia* (Lepidoptera: Noctuidae).– *Southwestern Entomologist,* **35**: 51-58. doi: 10.3958/059.035.0106.

ROBINSON, G. S., 1976.– The preparation of slides of Lepidoptera genitalia with special reference to the Microlepidoptera.– *Entomologist's gazette* **27**: 127-132.

TODD, E. L., 1972.– A note on the generic transfer of "*Catabena*" *esula* (Druce) and new synonymy.– *Proceedings of the Entomological Society of Washington,* **74**: 260.

TROUBRIDGE, J. T., 2008.– A generic realignment of the Onconcnemidini sensu Hodges (1983) (Lepidoptera: Noctuidae: Oncocnemidinae), with description of a new genus and 50 new species.– *Zootaxa,* **1903**: 1-95.

TROUBRIDGE, J. T., 2020.– A new genus and 37 new Noctuid species from peninsular Florida and the Keys (Lepidoptera: Noctuoidea).– *Insecta mundi,* **789**: 1-56.

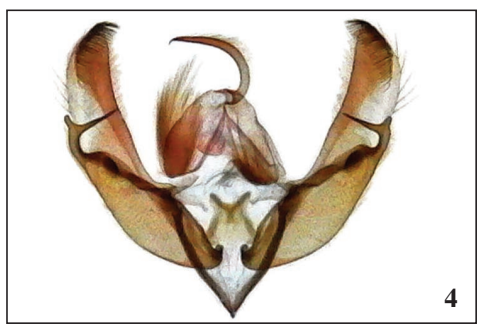
WALKER, F., 1865.– *List of the specimens of Lepidopterous insects in the collections of the British Museum*, **32**: 324-706. E, Newman, London.

ZHANG, B.-C., 1994.– Index of economically important Lepidoptera: 599 pp. CAB International. Wallingford, Oxon.

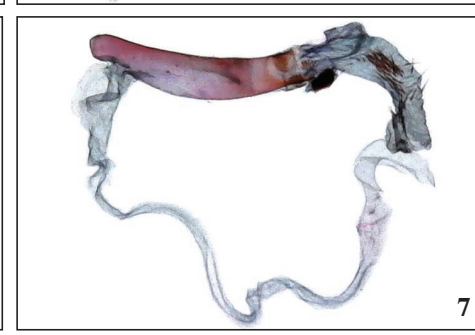
V. O. B.
Reserva Serra Bonita
P. O. Box 01
45.880-000 Camacan, BA
BRASIL / *BRAZIL*
E-mail: becker.vitor@gmail.com
https://orcid.org/0000-0001-9904-1176

(Recibido para publicación / *Received for publication* 1-X-2020)
(Revisado y aceptado / *Revised and accepted* 2-XII-2020)
(Publicado / *Published* 30-III-2021)

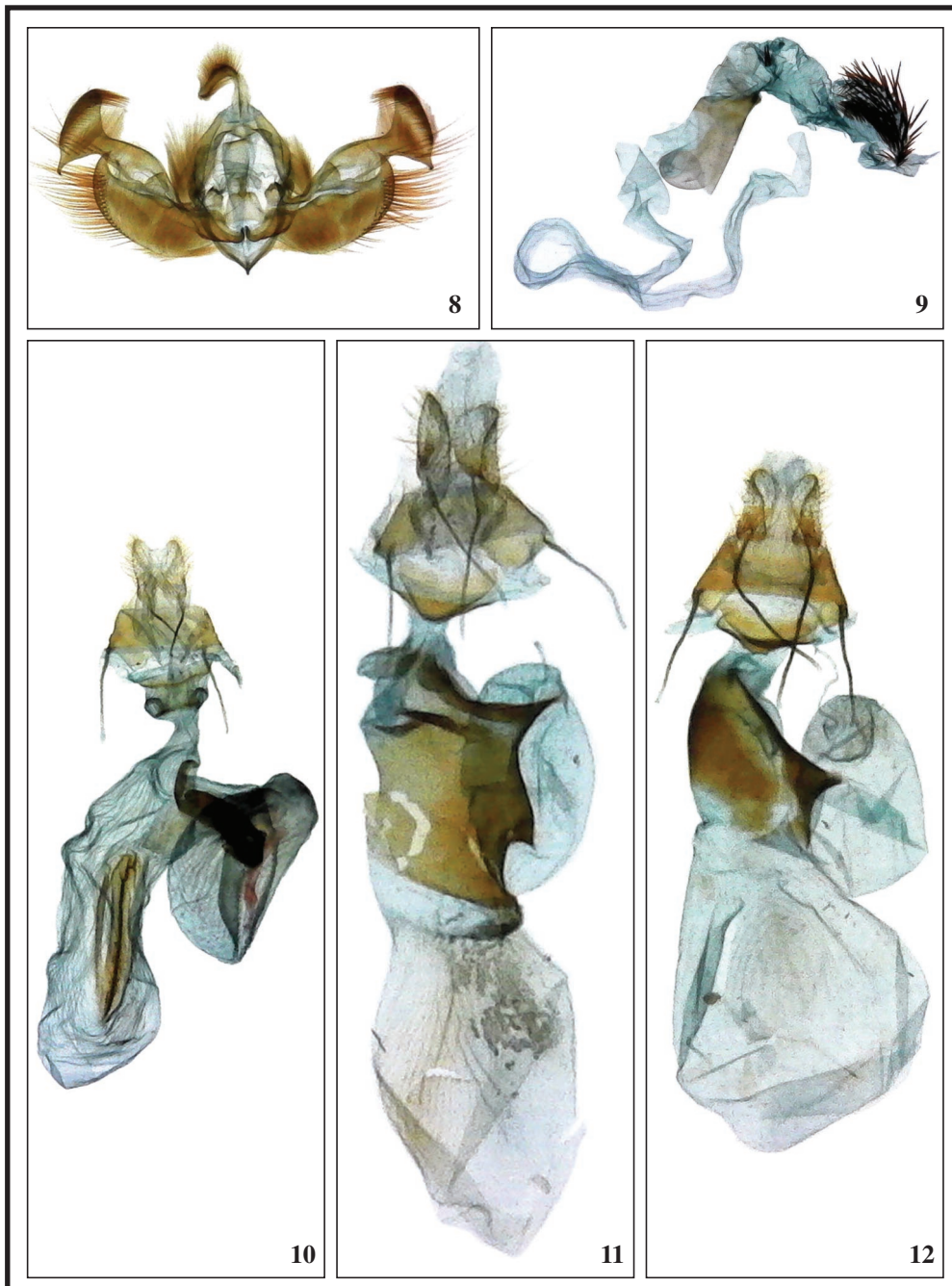





**Figs 1-7.–** Adults of *Neogalea.* **1.** *N. sororcula* Becker, sp. n., paratype ♀. **2.** *N. sunia* (Gn.). **3.** *N. caracara* Troubridge, ♂, Brazil. **4-12.–** Genitalia of *Neogalea.* **4.** *N. sororcula* Becker, sp. n., holotype ♂. **5.** *N. sororcula,* aedeagus. **6**. *N. sunia* (Gn.) ♂. **7.** *N. sunia* (Gn.), aedeagus.




**Figs 8-13.–** Genitalia of *Neogalea.* **8.** *N. caracara* Troubridge, ♂, Brazil. **9.** *N. caracara* Troubridge, aedeagus. **10.** *N. caracara* Troubridge, ♀. **11.** *N. sunia* (Gn.), ♀. **12.** *N. sororcula* Becker, sp. n., paratype ♀.